

8TH GRADE | SESSION 1 INFORMATIONAL TEXT ↘

Sodium and Your Health

Vocabulary words are in **bold** and underlined. See definitions on p. 4.

11 2
Na 8
Sodium 1
22.98976928

Preserving Our Food

Early humans were typically nomadic, traveling from place to place rather than settling. They often only hunted and gathered enough food for each day. However, once people began creating settlements and farming the land, they began to experiment with ways to preserve their food over longer periods of time. Preserving the food they grew and harvested allowed humans to farm during the warmer months and still have enough food to survive the winter.

The element sodium (Na) has long played an important role in food preservation. When combined with other elements like chloride (Cl), nitrogen (N), or oxygen (O), sodium helps prevent food from spoiling quickly and reduces the growth of dangerous bacteria. People most commonly associate sodium with table salt or sodium chloride (NaCl). However, you may be surprised to learn that much of the sodium in our food comes from food processing and not from the salt shaker.

Sodium is added to some packaged foods during processing such as in curing meat, baking, thickening, enhancing flavor, as a preservative, or to keep foods moist. It can be found in many foods, from potato chips to breakfast cereal to hot dogs to soups.

Sodium is an essential nutrient that helps with the function of nerves and muscles. It also helps to keep the right balance of fluids in our bodies. Our bodies need small amounts of sodium to work properly, but ingesting too much can lead to health problems.

Most of us consume a lot more sodium than we need, which may contribute to health problems like high blood pressure (hypertension).

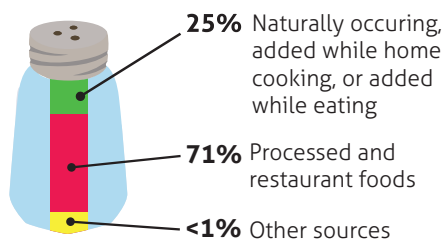


How is Sodium Consumed?

While it is important to be aware of how much salt you add to your food, most of the sodium you consume is already in your food by the time it is on your plate.

Only a small proportion of total sodium intake—just 25 percent—is from sodium naturally present in foods or from table salt added while cooking or at the table.¹

Sources of Sodium Intake

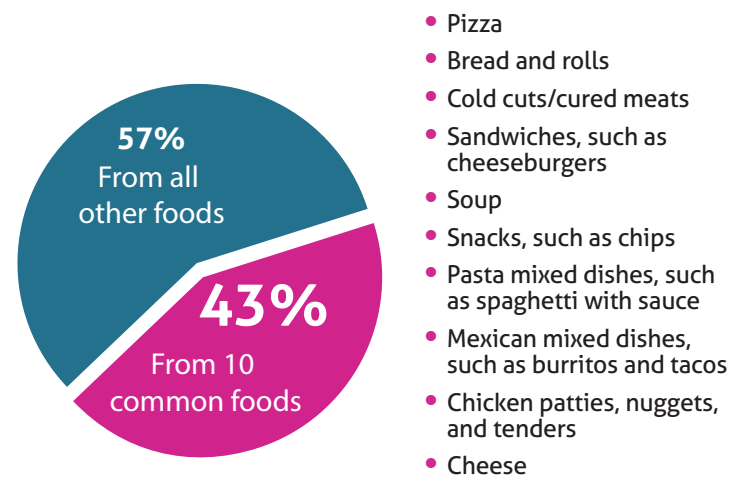


Most sodium consumed in the United States comes from salt added during the commercial food processing and preparation of packaged and restaurant foods, such as burgers, sandwiches, and tacos; rice, pasta, and grain dishes; pizza; meat, poultry, and seafood dishes; and soups.

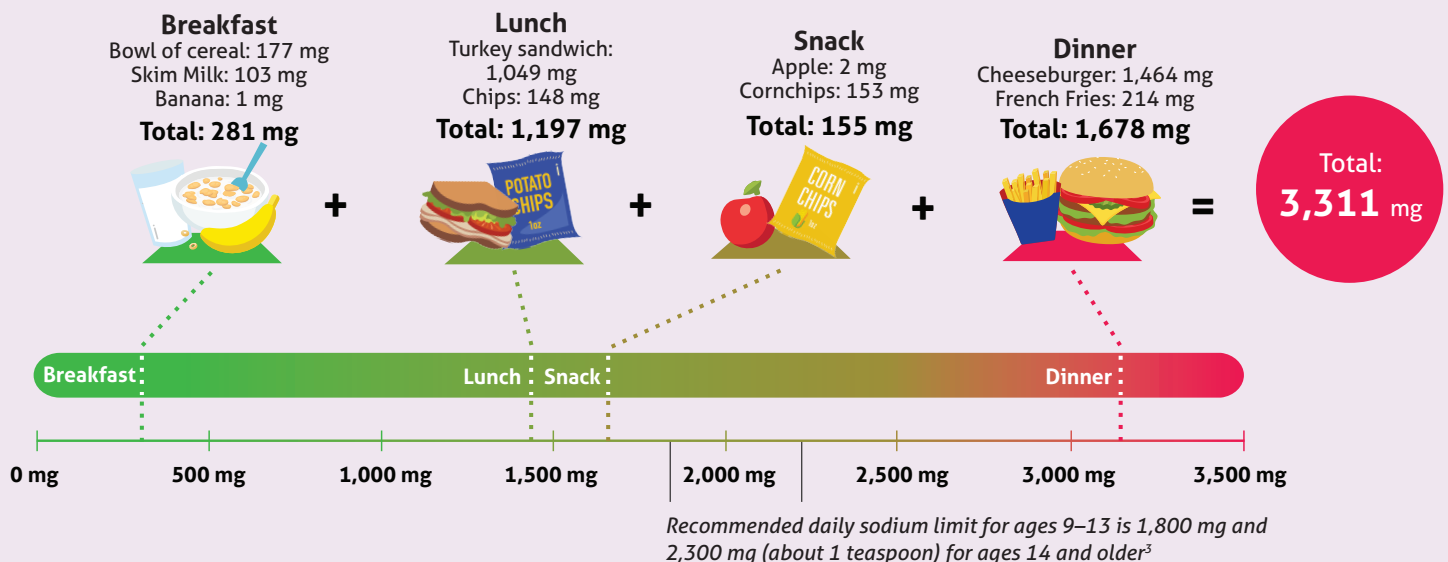
Top Sources of Sodium in Children's Diets

- Children ages 6 to 18 eat about 15 percent of sodium at breakfast, 30 percent at lunch, 39 percent at dinner, and 16 percent at snacks. Snacks alone account for a lot of children's sodium intake. Remember, foods can be high in sodium even if they don't taste salty.
- About 43 percent of sodium eaten by children comes from just 10 common food types:²

Top Sources of Sodium



Sodium Adds Up Quickly. Not all foods are high in sodium. But when you combine foods of varying levels as part of your daily eating pattern, sodium can add up quickly.



¹ Centers for Disease Control and Prevention. National Center for Chronic Disease Prevention and Health Promotion, Division for Heart Disease and Stroke Prevention. (2021, February 26). *Sodium and Food Sources*. <https://www.cdc.gov/salt/food.htm>.

² Centers for Disease Control and Prevention. National Center for Chronic Disease Control and Health Promotion, Division for Heart Disease and Stroke Prevention. (2014, September 9). *Reducing Sodium in Children's Diets*. <https://www.cdc.gov/VitalSigns/pdf/2014-09-vitalsigns.pdf>.

³ U.S. Department of Agriculture and U.S. Department of Health and Human Services. (2020, December). *Dietary Guidelines for Americans, 2020–2025*. 9th Edition. <https://dietaryguidelines.gov>.

How Does Sodium Affect Your Body?

Sometimes when you eat certain foods, you can feel their impact on your body right away. For example, drinking a lot of carbonated drinks might make you burp a few seconds later, and eating a lot of potato chips might make you very thirsty. Some of the effects of consuming too much sodium can take much longer to show up, but they are still very serious. It can be strange to think about what your life will be like in 5 or 10 or 20 years when you're not even sure what your plans are for this weekend.

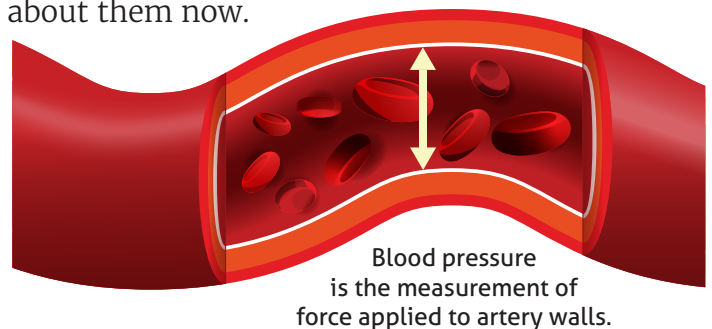
Most Americans ages 9–18 consume too much sodium.³ On average, as sodium intake increases, the risk of developing high blood pressure also increases.⁴

Making lower sodium choices now can help you stay healthy and active for the rest of your life.

Your blood needs a certain amount of pressure to move through your blood vessels and bring oxygen and nutrients to all of your organs.

However, if that pressure increases too much, it can put stress on your blood vessels and make it harder for your heart to pump blood where it needs to go. This is a condition known as high blood pressure or hypertension.

Over the long term, hypertension can increase the risk of heart attack, stroke, heart failure, vision loss, and kidney disease later in life. The effects of high blood pressure (hypertension) may develop slowly, but they can be very serious. Although these problems take years to develop, it's important to start thinking about them now.



Consequences of High Blood Pressure

Over time, high blood pressure can damage your body and lead to illness or even death.

STROKE

High blood pressure can damage your blood vessels and cause them to clog or burst. About 8 in 10 people who have a first stroke have high blood pressure.⁴



VISION LOSS

High blood pressure can strain the blood vessels in the eyes and result in blindness.

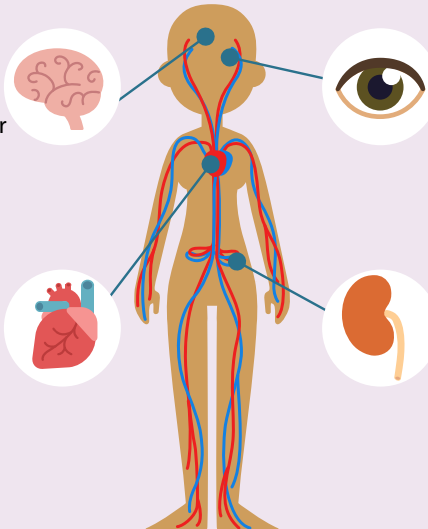
HEART ATTACK

High blood pressure can result in blocked blood vessels. About 7 in 10 people who have a first heart attack have high blood pressure.⁴



KIDNEY DISEASE OR FAILURE

The kidneys' job is to filter your blood. High blood pressure can damage blood vessels near your kidneys and make it harder for them to do their job.



³ See footnote 3 on p. 2.

⁴ Centers for Disease Control and Prevention. National Center for Chronic Disease Prevention and Health Promotion. (2020, October 7). *Heart Disease and Stroke*. <https://www.cdc.gov/chronicdisease/resources/publications/factsheets/heart-disease-stroke.htm>.

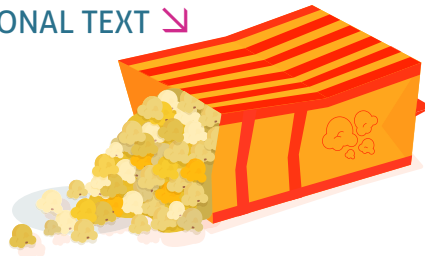
Picking Low Sodium Foods

Sodium is present in many foods, but if you know what to look for, choosing lower sodium options can be easy!

Skip higher sodium fast food meals and prepare foods at home so you can control the amount of salt and the ingredients that go into your food. With your family, try recipes that use salt-free herbs and spices instead of prepackaged sauces or salty seasonings. Condiments and sauces can also be high in sodium so add sauces like ketchup and salad dressing in moderation.

Choose unsalted, lower sodium, or lightly salted snack foods instead of regular versions.

Look for snacks that have less than 200 milligrams of sodium per serving.



Popcorn (popped in oil and buttered)

Nutrition Facts	
1 serving per container	
Serving size: 2 cups (208g)	
Amount per serving	
Calories	151
% Daily Value*	
Total Fat 9g	19%
Saturated Fat 4g	19%
Trans Fat 0g	
Cholesterol 0mg	0%
Sodium 200mg	9%
Total Carbohydrate 16g	12%
Dietary Fiber 3g	11%
Total Sugars 1g	
Includes 0g Added Sugars	
Protein 2g	
Vitamin D	0%
Calcium	0%
Iron	3%
Potassium	3%

* The % Daily Value (DV) tells you how much a nutrient in a serving of food contributes to a daily diet. 2,000 calories a day is used for general nutrition advice.



Popcorn (air-popped, no butter or oil added)

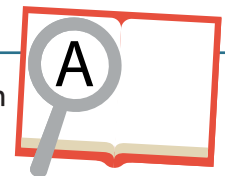
Nutrition Facts	
1 serving per container	
Serving size: 2 cups (208g)	
Amount per serving	
Calories	62
% Daily Value*	
Total Fat 1g	0%
Saturated Fat 0g	19%
Trans Fat 0g	
Cholesterol 0mg	0%
Sodium 1mg	0%
Total Carbohydrate 12g	10%
Dietary Fiber 2g	9%
Total Sugars 0g	
Includes 0g Added Sugars	
Protein 2g	
Vitamin D	0%
Calcium	0%
Iron	0%
Potassium	3%

* The % Daily Value (DV) tells you how much a nutrient in a serving of food contributes to a daily diet. 2,000 calories a day is used for general nutrition advice.

Conclusion

Choosing lower sodium foods is an important part of a healthy lifestyle. Sodium is added to all kinds of foods, so it's important to know how to choose lower sodium options. Making healthier food choices may help you live a healthier life for many years to come.

VOCABULARY



Curing Meat: The process of preserving meat, which often includes adding sodium. Examples of cured meat are salami, sausage, and jerky.

Hypertension: Blood pressure is a measurement of the force exerted against the walls of your arteries as your heart pumps blood to your body. Hypertension is the term used to describe high blood pressure.

Nomadic: Roaming about from place to place.

Preserve: To prevent food from spoiling.

Sodium: A mineral generally consumed in the form of salt (sodium chloride) that your body needs in small amounts to work properly. However, when consumed in excessive amounts, sodium may raise the risk of high blood pressure (hypertension).

IF YOU ARE USING ACROBAT X OR PRO:

- ## IF YOU WANT TO SAVE IN ADOBE READER:

- [illegible]

2. Sodium is added to foods for various reasons. What are three ways that sodium affects our food?

1. _____
2. _____
3. _____

3. At your upcoming student health fair, you are asked to present to your peers about the impact of sodium on health. Provide three important pieces of information that you feel should be shared in order to motivate changes in their eating behaviors.

1. _____
2. _____
3. _____

4. Reflecting on your own food intake, what are three food items you eat that contain a high level of sodium?

1. _____
2. _____
3. _____

5. Look up the Nutrition Facts labels for one of the foods you listed in Question 4 and complete the blank label on the left. Then, find an alternative that is lower in sodium and complete its Nutrition Facts label on the right. Write the name of the food for each Nutrition Facts label.

FAVORITE FOOD ITEM:

LOWER SODIUM ALTERNATIVE:

Nutrition Facts	
serving per container	
Serving size	
Amount per serving	
Calories	
	% Daily Value*
Total Fat	
Saturated Fat	
Trans Fat	
Cholesterol	
Sodium	
Total Carbohydrate	
Dietary Fiber	
Total Sugars	
Includes ___ g Added Sugars	
Protein	
Vitamin D	
Calcium	
Iron	
Potassium	
* The % Daily Value (DV) tells you how much a nutrient in a serving of food contributes to a daily diet. 2,000 calories a day is used for general nutrition advice.	

Nutrition Facts	
serving per container	
Serving size	
Amount per serving	
Calories	
	% Daily Value*
Total Fat	
Saturated Fat	
Trans Fat	
Cholesterol	
Sodium	
Total Carbohydrate	
Dietary Fiber	
Total Sugars	
Includes ___ g Added Sugars	
Protein	
Vitamin D	
Calcium	
Iron	
Potassium	
* The % Daily Value (DV) tells you how much a nutrient in a serving of food contributes to a daily diet. 2,000 calories a day is used for general nutrition advice.	

6. List three changes that you can make to reduce the amount of sodium you consume.

- 1. _____
- 2. _____
- 3. _____

7. Imagine your friend or family member doesn't understand why choosing lower sodium foods is an important part of a healthy lifestyle. How would you convince them? Write a paragraph explaining your opinion.
